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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,570	05/31/2001	Sang Hoon Oh	3593/7	3488

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EXAMINER

MILORD, MARCEAU

ART UNIT PAPER NUMBER

2682

DATE MAILED: 12/08/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,570

Applicant(s)

OH ET AL.

Examiner

Marceau Milord

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer, Jr et al. (US Patent No 5588041) in view of Zurek et al (US Patent No 6636750 B1)

Regarding claims 1-18, Meyer, Jr et al discloses a portable (100 of figs. 1-2) hands-free adapter device (207 of fig. 2) for use with a cellular telephone (fig. 2), the device comprising: a loudspeaker electrically coupleable to the output of a cellular telephone (fig. 2); a microphone (105 of fig. 1 or 121 of fig. 3) electrically coupleable to the input of a cellular telephone (figs. 2-3; col. 5, line 25- col. 6, line 64); a housing (101 of fig. 1) containing the loudspeaker and microphone (105 of fig. 1 or 121 of fig. 3; col. 2, line 21- col. 3, line 66), the housing (101 of fig. 1) being approximately pocket-sized (col. 9, line 1- col. 10, line 52).

However, Meyer Jr et al does not specifically disclose the feature of a housing containing the loudspeaker and microphone the housing being approximately pocket-sized; and means for reducing internal howling within the housing.

On the other hand, Zurek et al, from the same field of endeavor, discloses a speakerphone, which is provided for use with a portable telephone. The speakerphone accessory has a high-level speaker assembly that includes a transducer coupled to first and second

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resonators. The high-level speaker assembly provides an acoustic bandpass having improved response when compared to the response of the transducer alone. In addition, the speakerphone accessory has a housing and porting structure which allows the accessory and attached portable to be used in a variety of positions without obstructing sound generated by the high-level speaker assembly (col. 2, lines 13-67). Furthermore, Zurek et al shows in figure 2, a control board 220, which is disposed inside the accessory housing 130 and is coupled to the connection port 144. The speakerphone accessory 100 includes its own echo cancellation software. By providing echo cancellation software in the speakerphone accessory 100, the accessory is made compatible with existing portable telephones (col. 3, line 19- col. 4, line 55). It is considered that the echo cancellers are used in order to reduce negative effects of howling or feedback since the speakerphone assembly may also include a system controller, it means that this device can reduce the sensitivity of the microphone or volume of the speaker. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the speakerphone of Zurek to the system of Meyer for the purpose of providing a compact speakerphone device which can be adapted to a cellular telephone, and which device can be included sound insulation material disposed around the microphone in order to reduce howling.

Regarding claim 19, Meyer, Jr et al discloses a portable (100 of figs. 1-2) hands-free adapter device for use with a cellular telephone (fig. 2), the device comprising: a loudspeaker electrically coupleable to the output of a cellular telephone (fig. 2); a microphone (105 of fig. 1 or 121 of fig. 3) electrically coupleable to the input of a cellular telephone (figs. 2-3; col. 5, line 25- col. 6, line 64); a housing (101 of fig. 1) containing the loudspeaker and microphone (105 of fig. 1 or 121 of fig. 3; col. 2, line 21- col. 3, line 66; col. 9, line 1- col. 10, line 52).

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However, Meyer Jr et al does not specifically disclose the features of a housing containing the loudspeaker and microphone, the housing being approximately pocket-sized; attenuation circuitry coupled to the loudspeaker and microphone; and sound insulation positioned between the loudspeaker and microphone, wherein the attenuation circuitry and sound insulation reduce howling sufficiently to enable use of the device as a speakerphone.

On the other hand, Zurek et al, from the same field of endeavor, discloses a speakerphone, which is provided for use with a portable telephone. The speakerphone accessory has a high-level speaker assembly that includes a transducer coupled to first and second resonators. The high-level speaker assembly provides an acoustic bandpass having improved response when compared to the response of the transducer alone. In addition, the speakerphone accessory has a housing and porting structure which allows the accessory and attached portable to be used in a variety of positions without obstructing sound generated by the high-level speaker assembly (col. 2, lines 13-67). Furthermore, Zurek et al shows in figure 2, a control board 220, which is disposed inside the accessory housing 130 and is coupled to the connection port 144. The speakerphone accessory 100 includes its own echo cancellation software. By providing echo cancellation software in the speakerphone accessory 100, the accessory is made compatible with existing portable telephones (col. 3, line 19- col. 4, line 55). It is considered that the echo cancellers are used in order to reduce negative effects of howling or feedback since the speakerphone assembly may also include a system controller, it means that this device can reduce the sensitivity of the microphone or volume of the speaker. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the speakerphone of Zurek to the system of Meyer for the purpose of providing a compact

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speakerphone device which can be adapted to a cellular telephone, and which device can be included sound insulation material disposed around the microphone in order to reduce howling

Regarding claims 20-21, Meyer, Jr et al discloses a portable (100 of figs. 1-2) hands-free adapter device (207 of fig. 2) for use with a cellular telephone (fig. 2), the device comprising: a loudspeaker electrically coupleable to the output of a cellular telephone (fig. 2); a microphone (105 of fig. 1 or 121 of fig. 3) electrically coupleable to the input of a cellular telephone (figs. 2-3; col. 5, line 25- col. 6, line 64); a housing (101 of fig. 1) containing the loudspeaker and microphone (105 of fig. 1 or 121 of fig. 3; col. 2, line 21- col. 3, line 66; col. 9, line 1- col. 10, line 52).

However, Meyer Jr et al does not specifically disclose the features of a housing containing the loudspeaker and microphone the housing being approximately pocket-sized and forming a plane; and means for insulating sound positioned within the housing between the loudspeaker and microphone; wherein the outlet of the loudspeaker faces in a first direction substantially normal to the plane of the housing and the outlet of the microphone faces in a second direction substantially normal to the plane of the housing means for reducing internal howling within the housing.

On the other hand, Zurek et al, from the same field of endeavor, discloses a speakerphone, which is provided for use with a portable telephone. The speakerphone accessory has a high-level speaker assembly that includes a transducer coupled to first and second resonators. The high-level speaker assembly provides an acoustic bandpass having improved response when compared to the response of the transducer alone. In addition, the speakerphone accessory has a housing and porting structure which allows the accessory and attached portable

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to be used in a variety of positions without obstructing sound generated by the high-level speaker assembly (col. 2, lines 13-67). Furthermore, Zurek et al shows in figure 2, a control board 220, which is disposed inside the accessory housing 130 and is coupled to the connection port 144. The speakerphone accessory 100 includes its own echo cancellation software. By providing echo cancellation software in the speakerphone accessory 100, the accessory is made compatible with existing portable telephones (col. 3, line 19- col. 4, line 55). It is considered that the echo cancellers are used in order to reduce negative effects of howling or feedback since the speakerphone assembly may also include a system controller, it means that this device can reduce the sensitivity of the microphone or volume of the speaker. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the speakerphone of Zurek to the system of Meyer for the purpose of providing a compact speakerphone device which can be adapted to a cellular telephone, and which device can be included sound insulation material disposed around the microphone in order to reduce howling

Regarding claim 22, Meyer, Jr et al discloses a portable (100 of figs. 1-2) hands-free adapter device (207 of fig. 2) for use with a cellular telephone (fig. 2), the device comprising: a loudspeaker electrically coupleable to the output of a cellular telephone (fig. 2); a microphone (105 of fig. 1 or 121 of fig. 3) electrically coupleable to the input of a cellular telephone (figs. 2-3; col. 5, line 25- col. 6, line 64); a housing (101 of fig. 1) containing the loudspeaker and microphone (105 of fig. 1 or 121 of fig. 3; col. 2, line 21- col. 3, line 66).

However, Meyer Jr et al does not specifically disclose the feature of a housing containing the loudspeaker and microphone, the housing being approximately pocket-sized; and means for insulating sound positioned within the housing between the loudspeaker and microphone.

On the other hand, Zurek et al, from the same field of endeavor, discloses a speakerphone, which is provided for use with a portable telephone. The speakerphone accessory has a high-level speaker assembly that includes a transducer coupled to first and second resonators. The high-level speaker assembly provides an acoustic bandpass having improved response when compared to the response of the transducer alone. In addition, the speakerphone accessory has a housing and porting structure which allows the accessory and attached portable to be used in a variety of positions without obstructing sound generated by the high-level speaker assembly (col. 2, lines 13-67). Furthermore, Zurek et al shows in figure 2, a control board 220, which is disposed inside the accessory housing 130 and is coupled to the connection port 144. The speakerphone accessory 100 includes its own echo cancellation software. By providing echo cancellation software in the speakerphone accessory 100, the accessory is made compatible with existing portable telephones (col. 3, line 19- col. 4, line 55). It is considered that the echo cancellers are used in order to reduce negative effects of howling or feedback since the speakerphone assembly may also include a system controller, it means that this device can reduce the sensitivity of the microphone or volume of the speaker. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the speakerphone of Zurek to the system of Meyer for the purpose of providing a compact speakerphone device which can be adapted to a cellular telephone, and which device can be included sound insulation material disposed around the microphone in order to reduce howling

Regarding claim 23, Meyer, Jr et al discloses a portable (100 of figs. 1-2) hands-free adapter device (207 of fig. 2) for use with a cellular telephone (fig. 2), the device comprising: a loudspeaker electrically coupleable to the output of a cellular telephone (fig. 2); a microphone

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(105 of fig. 1 or 121 of fig. 3) electrically coupleable to the input of a cellular telephone (figs. 2-3; col. 5, line 25- col. 6, line 64); a housing (101 of fig. 1) containing the loudspeaker and microphone (105 of fig. 1 or 121 of fig. 3; col. 2, line 21- col. 3, line 66; col. 9, line 1- col. 10, line 52).

However, Meyer Jr et al does not specifically disclose the feature of a housing (101 of fig. 1) containing the loudspeaker and microphone (105 of fig. 1 or 121 of fig. 3; col. 2, line 21- col. 3, line 66), the housing (101 of fig. 1) being approximately pocket-sized forming a plane; wherein the outlet of the loudspeaker faces in a first direction substantially normal to the plane of the housing and the outlet of the microphone faces in a second direction substantially normal to the plane of the housing.

On the other hand, Zurek et al, from the same field of endeavor, discloses a speakerphone, which is provided for use with a portable telephone. The speakerphone accessory has a high-level speaker assembly that includes a transducer coupled to first and second resonators. The high-level speaker assembly provides an acoustic bandpass having improved response when compared to the response of the transducer alone. In addition, the speakerphone accessory has a housing and porting structure which allows the accessory and attached portable to be used in a variety of positions without obstructing sound generated by the high-level speaker assembly (col. 2, lines 13-67). Furthermore, Zurek et al shows in figure 2, a control board 220, which is disposed inside the accessory housing 130 and is coupled to the connection port 144. The speakerphone accessory 100 includes its own echo cancellation software. By providing echo cancellation software in the speakerphone accessory 100, the accessory is made compatible with existing portable telephones (col. 3, line 19- col. 4, line 55). It is considered that the echo

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cancellers are used in order to reduce negative effects of howling or feedback since the speakerphone assembly may also include a system controller, it means that this device can reduce the sensitivity of the microphone or volume of the speaker. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the speakerphone of Zurek to the system of Meyer for the purpose of providing a compact speakerphone device which can be adapted to a cellular telephone, and which device can be included sound insulation material disposed around the microphone in order to reduce howling

Regarding claims 24-34, Meyer, Jr et al discloses a method for making a portable speakerphone device (100 of figs. 1-2) adaptable for use with a cellular telephone (figs. 2-3; col. 5, line 25- col. 6, line 64), the method comprising: providing a housing means (101 of fig. 1; col. 4, lines 7-64; col. 7, line 36- col. 8, line 59) disposing loudspeaker means within the housing means (101 of fig. 1); disposing microphone means (105 of fig. 1 or 121 of fig. 3; col. 2, line 21- col. 3, line 66; col. 9, line 1- col. 10, line 52).

However, Meyer Jr et al does not specifically disclose the steps of providing pocket sized housing means defining an exterior of the device; disposing loudspeaker means within the housing means; disposing microphone means within the housing means; providing means for reducing internal howling within the housing.

On the other hand, Zurek et al, from the same field of endeavor, discloses a speakerphone, which is provided for use with a portable telephone. The speakerphone accessory has a high-level speaker assembly that includes a transducer coupled to first and second resonators. The high-level speaker assembly provides an acoustic bandpass having improved response when compared to the response of the transducer alone. In addition, the speakerphone

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accessory has a housing and porting structure which allows the accessory and attached portable to be used in a variety of positions without obstructing sound generated by the high-level speaker assembly (col. 2, lines 13-67). Furthermore, Zurek et al shows in figure 2, a control board 220, which is disposed inside the accessory housing 130 and is coupled to the connection port 144. The speakerphone accessory 100 includes its own echo cancellation software. By providing echo cancellation software in the speakerphone accessory 100, the accessory is made compatible with existing portable telephones (col. 3, line 19- col. 4, line 55). It is considered that the echo cancellers are used in order to reduce negative effects of howling or feedback since the speakerphone assembly may also include a system controller, it means that this device can reduce the sensitivity of the microphone or volume of the speaker. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the speakerphone of Zurek to the system of Meyer for the purpose of providing a compact speakerphone device which can be adapted to a cellular telephone, and which device can be included sound insulation material disposed around the microphone in order to reduce howling

Regarding claim 35, Meyer, Jr et al discloses a method for making a portable speakerphone device (100 of figs. 1-2) adaptable for use with a cellular telephone (figs. 2-3; col. 5, line 25- col. 6, line 64), the method comprising: providing housing means (101 of fig.1; col. 4, lines 7-64; col. 7, line 36- col. 8, line 59); disposing loudspeaker means within the housing means (101 of fig. 1) disposing microphone means (105 of fig. 1 or 121 of fig. 3; col. 2, line 21- col. 3, line 66) within the housing means (101 of fig. 1); providing attenuation circuitry means (col. 7, line 36- col. 8, line 65; col. 9, line 1- col. 10, line 52).

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However, Meyer Jr et al does not specifically disclose the steps of providing pocket sized housing means defining an exterior of the device; disposing loudspeaker means within the housing means; disposing microphone means within the housing means; providing attenuation circuitry means; and providing sound insulation means positioned between the loudspeaker means and the microphone means; wherein the attenuation circuitry means and the insulation means reduce howling sufficiently to enable use of the device as a telephone speakerphone, and wherein the outlet of the loudspeaker faces in the same direction as the outlet of the microphone, and wherein a line extending between the outlet of the loudspeaker and the outlet of the microphone would form a right angle with a line extending in the direction that the outlet of the loudspeaker and the outlet of the microphone face.

On the other hand, Zurek et al, from the same field of endeavor, discloses a speakerphone, which is provided for use with a portable telephone. The speakerphone accessory has a high-level speaker assembly that includes a transducer coupled to first and second resonators. The high-level speaker assembly provides an acoustic bandpass having improved response when compared to the response of the transducer alone. In addition, the speakerphone accessory has a housing and porting structure which allows the accessory and attached portable to be used in a variety of positions without obstructing sound generated by the high-level speaker assembly (col. 2, lines 13-67). Furthermore, Zurek et al shows in figure 2, a control board 220, which is disposed inside the accessory housing 130 and is coupled to the connection port 144. The speakerphone accessory 100 includes its own echo cancellation software. By providing echo cancellation software in the speakerphone accessory 100, the accessory is made compatible with existing portable telephones (col. 3, line 19- col. 4, line 55). It is considered that the echo

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cancellers are used in order to reduce negative effects of howling or feedback since the speakerphone assembly may also include a system controller, it means that this device can reduce the sensitivity of the microphone or volume of the speaker. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the speakerphone of Zurek to the system of Meyer for the purpose of providing a compact speakerphone device which can be adapted to a cellular telephone, and which device can be included sound insulation material disposed around the microphone in order to reduce howling

Response to Arguments

2. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 703-306-3023. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


MARCEAU MILORD

Marceau Milord
Examiner
Art Unit 2682